

Getting Started Guide

AppManager Operations Portal 5.5

March 3, 2014

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About This Guide

The *NetIQ AppManager Operations Portal Getting Started Guide* provides information on how to use the NetIQ Operations Center Web-based application solution to provides users with a personalized and portable view into AppManager Control Center.

- Chapter 1, "About the AppManager Operations Portal," on page 7
- Chapter 2, "Installing and Configuring the AppManager Operations Portal," on page 11
- Chapter 3, "Using the AppManager Operations Portal," on page 27
- Appendix A, "Advanced Administrative Topics," on page 35

Audience

This guide is intended for NetIQ AppManager administrators who are configuring a dashboard.

Feedback

We want to hear your comments and suggestions about this manual and the other documentation included with this product. Please use the *User Comments* feature at the bottom of each page of the online documentation.

Additional Documentation & Documentation Updates

This guide is part of the Operations Center documentation set. For the most recent version of the *NetIQ AppManager Operations Portal Getting Started Guide* and a complete list of publications supporting Operations Center, visit our Online Documentation Web Site at Operations Center 5.5 online documentation.

The Operations Center documentation set is also available as PDF files on the installation CD or ISO; and is delivered as part of the online help accessible from multiple locations in Operations Center depending on the product component.

Additional Resources

We encourage you to use the following additional resources on the Web:

- NetIQ User Community (https://www.netiq.com/communities/): A Web-based community with a variety of discussion topics.
- NetIQ Support Knowledgebase (https://www.netiq.com/support/kb/product.php?id=SG_XOPERATIONSCENTER_1_2): A collection of in-depth technical articles.
- NetIQ Support Forums (https://forums.netiq.com/forumdisplay.php?26-Operations-Center): A Web location where product users can discuss NetIQ product functionality and advice with other product users.

Technical Support

You can learn more about the policies and procedures of NetIQ Technical Support by accessing its Technical Support Guide (https://www.netiq.com/Support/process.asp#_Maintenance_Programs_and).

Use these resources for support specific to Operations Center:

- Telephone in Canada and the United States: 1-800-858-4000
- Telephone outside the United States: 1-801-861-4000
- E-mail: support@netiq.com (support@netiq.com)
- Submit a Service Request: http://support.novell.com/contact/ (http://support.novell.com/contact/)

Documentation Conventions

A greater-than symbol (>) is used to separate actions within a step and items in a cross-reference path. The > symbol is also used to connect consecutive links in an element tree structure where you can either click a plus symbol (+) or double-click the elements to expand them.

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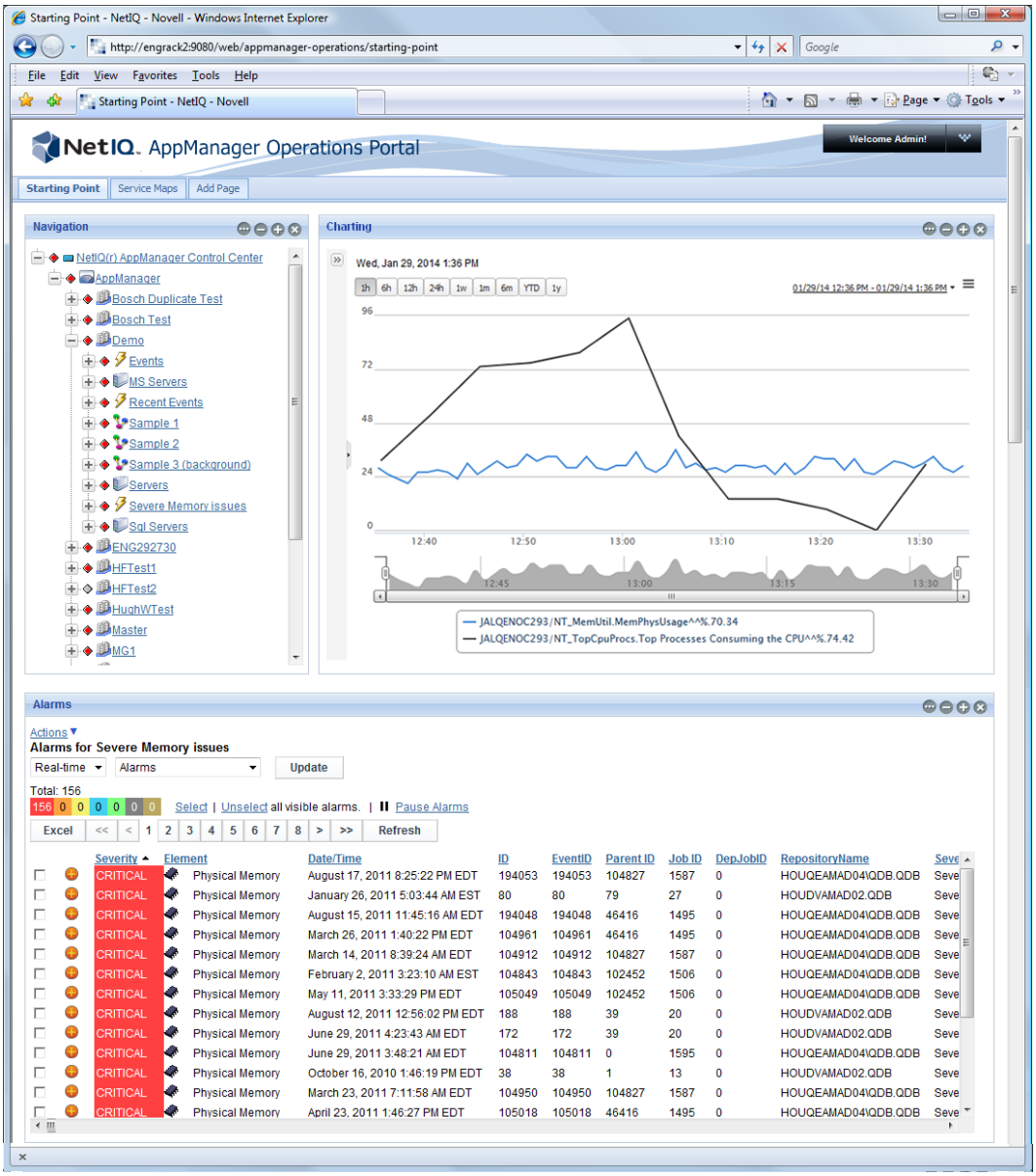
When a single path name can be written with a backslash for some platforms or a forward slash for other platforms, the path name is presented with a forward slash to preserve case considerations in the UNIX* or Linux* operating systems.

1 About the AppManager Operations Portal

The NetIQ AppManager Operations Portal is a specialized implementation of the NetIQ Operations Center server and dashboard. Because this implementation is a scaled down version of Operations Center products, Operations Center functionality covered in other guides might not be available in this implementation.

The AppManager Operations Portal is a Web-based application that provides AppManager Control Center users with a personalized and portable view into your Control Center server. It allows for personalization, and integration of data from AppManager sources.

Figure 1-1 *The AppManager Operations Portal*



The AppManager Operations Portal utilizes portlets to provide functionality and content from various sources. The AppManager Operations Portal is standards compliant. Therefore, JSR-168 portlets can be deployed in the portal. Portlets from third-party sources including Liferay v.5.2 are leveraged by the AppManager Operations Portal.

A portlet is a Web-based application built for integration into a portal; it serves as a frame or container for content. Content, including events from AppManager Control Center, can be updated in real time.

For users, the AppManager Operations Portal provides a personal Web desktop. They can personalize the display, customize the content, and save changes between sessions. Not only can private, personal pages be created, but users can join communities that have shared pages. Content can be distributed among communities and the responsibility of moderating content can be delegated to various users.

- Section 1.1, “Getting Started with the AppManager Portal,” on page 9

1.1 Getting Started with the AppManager Portal

To install and configure the AppManager Portal:

1. Install and configure the Operations Center server and Operations Center Dashboard.

   For instructions, see Chapter 2, “Installing and Configuring the AppManager Operations Portal,” on page 11.
2. Customize the AppManager Portal

   For instructions, see Chapter 3, “Using the AppManager Operations Portal,” on page 27.
3. Perform advanced configurations as required.

   For instructions, see Appendix A, “Advanced Administrative Topics,” on page 35.

2 Installing and Configuring the AppManager Operations Portal

The NetIQ AppManager Operations Portal requires that you install the latest version of NetIQ Operations Center Server and Dashboard, and perform a few additional configurations.

If you have already installed the AppManager Operations Portal, and are performing a patch upgrade, see Section A.2, "Upgrading the AppManager Operations Portal," on page 40 for technical considerations and required configurations.

If you are installing AppManager Operations Portal for the first time, do the following in the order listed:

- Section 2.1, "Installation Requirements," on page 11
- Section 2.2, "Installing Operations Center Server and Dashboard," on page 13
- Section 2.3, "Creating and Configuring AppManager Adapters," on page 15
- Section 2.4, "Configuring the NetIQ Control Center Adapter," on page 19
- Section 2.5, "Configuring the Dashboard Integration," on page 22

2.1 Installation Requirements

Operations Center components not only work together, but also interact with existing components in your environment. When installing Operations Center tools and components, there are minimum hardware requirements that must be met. Keep in mind that requirements vary, depending on the site, and might be higher because of the size of your organization's managed infrastructure. For details, please see "Supported Versions and Hardware Requirements" in the *Operations Center 5.5 Getting Started Guide*.

2.1.1 Supported Platforms

AppManager Operations Portal is supported on the following platforms:

- Microsoft Windows Server 2008
- Microsoft Windows Server 2008 R2
- Microsoft Windows Server 2012

Operations Center require 64-bit Virtual Machines because of the memory demands of the application.

NOTE: Although the standard Operations Center documentation allows for installation of its components on multiple Operating Systems, the AppManager Operations Portal is only supported when all components are installed on the Microsoft Windows Server versions specified above.

2.1.2 Supported Databases

AppManager Operations Portal supports the following databases:

- Microsoft SQL Server 2008
- Microsoft SQL Server 2008 R2
- Microsoft SQL Server 2012

NOTE: Although the standard Operations Center documentation allows for usage of multiple databases, the AppManager Operations Portal is only supported when using the Microsoft SQL Server databases listed above. Databases must be case insensitive.

2.1.3 Server Requirements

Any server-class machine that supports JRE 7 and one of the specified Operations Systems listed above. Operations Center is certified for Java 1.7.0_60

Memory and processing speed requirements vary widely based on your configuration. At a minimum, 8 GB of RAM for 64-bit and a dual-processor are estimated for an average size implementation, but more RAM and or processors might be required.

It might be necessary to tune the JVM memory settings based on your usage and environment. If you need help determining more specific hardware requirements, contact NetIQ Consulting.

2.1.4 Disk Space Requirements

Disk space requirements for the AppManager Operations Portal vary based on the size and configuration of your environment. Below is the minimum disk space estimates based on a Control Center environment with 8 AppManager repositories.

- 2 GB for the Operations Center server
- 650 MB for the Operations Center configuration storage database (estimated growth rate is approximately 50 - 100 MB per AppManager repository)
- 1.5 GB for the Operations Center dashboard.
- 100 MB for the dashboard database (estimated growth rate is approximately 30 MB per community)

2.1.5 Client Platform Requirements

Operations Center supports:

- Microsoft Internet Explorer 10, 11 (Adobe SVG Plug-in is required to access some features in the Operations Center Dashboard)
- Mozilla Firefox
- Google Chrome

Any machine on which the Operations Center console is run must be connected to the Internet or the corporate Intranet and meet the following minimum requirements:

- Minimum free disk space of 200 MB
- Minimum memory allocation space (RAM) of 2GB RAM

- Minimum processing speed of 1 GHz (Windows)
- For information, see "Supported Versions and Hardware Requirements" in the *Operations Center 5.5 Getting Started Guide*.

2.2 Installing Operations Center Server and Dashboard

The AppManager Operations Portal requires the installation of the NetIQ Operations Center Server and Dashboard.

WARNING: The configuration processes required for the AppManager Operations Portal overwrites any pre-existing NetIQ AppManager adapter definitions saved with the name `NetIQ(r)AppManager(r)`, and custom configurations to that adapter are lost.

Before you start the following procedure, have the following guides available for reference:

- *Operations Center 5.5 Release Notes*
- *Operations Center 5.5 Server Installation Guide*
- *Operations Center 5.5 Dashboard Guide*

To install Operations Center software:

1. Install Operations Center.

   For instructions, see the following sections in the *Operations Center 5.5 Server Installation Guide*:

   - "Installation Requirements"
   - "Operations Center Server Installation"

   Do not start the Operations Center server as part of this installation process.

2. Install Operations Center Dashboard.

   For instructions, see the following sections in the *Operations Center 5.5 Dashboard Guide*:

   - "Performance Considerations"
   - "Installing the Dashboard"

   Do not start the Dashboard as part of this installation process.

3. Install the latest Operations Center Server and Dashboard Patch Releases.

   For instructions on patching the server, see "Patching Operations Center Server Software" in the *Operations Center 5.5 Server Installation Guide*.

   For instructions on patching the dashboard, see "Upgrading the Dashboard" in the *Operations Center 5.5 Dashboard Guide*.

4. Do one of the following to start the Operations Center server.

   - **Windows:** Select *Start NetIQ Operations Center* under *Start* > *Programs* > *NetIQ Operations Center*.

     Starting Operations Center via the Windows Start menu, starts the Operations Center server locally, but not as a service. Therefore, when you log out, the Operations Center server stops.

   - **UNIX** Log in as the user `formula` (or another user with root privileges) and from the `/OperationsCenter_install_path/bin` directory, type `mosdaemon` at a command prompt.

   For additional instructions including configurations to automatically start the server, see "Starting and Stopping the Server" in the *Operations Center 5.5 Server Installation Guide*.

5 Import NetIQ Control Center configurations.

5a Perform the following steps to launch the Operations Center console.

5a1 Start a Java-enabled Web browser.

5a2 In the Location/Address field, enter the following Uniform Resource Locator (URL) address:

`http://server_name:80`

where *server_name* is the Transmission Control Protocol/Internet Protocol (TCP/IP) hostname of the server that is running Operations Center and `80` is the default port setting on Windows. On UNIX, the default server port is `8080`.

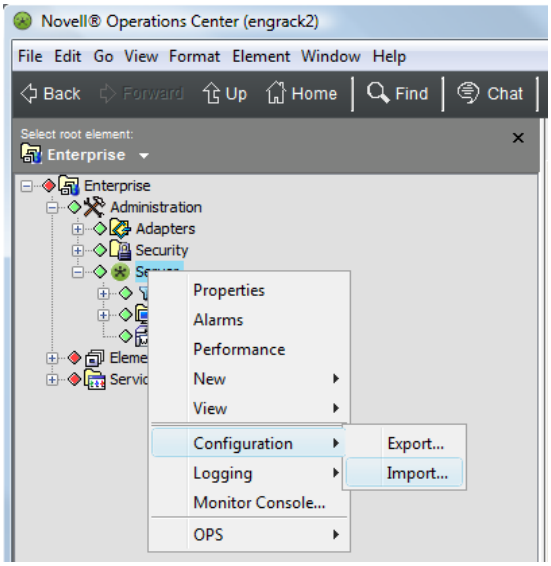
The Operations Center server login page displays

5a3 Enter your login credentials and click *Login*.

5b From the Explorer pane, expand *Administration*.

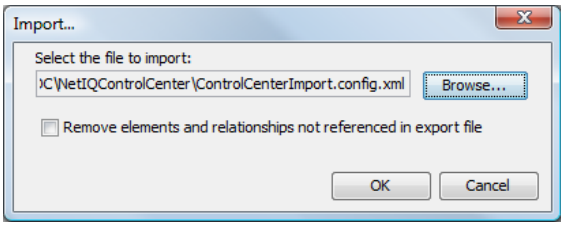
5c Perform the following steps to import the XML file necessary to create the Control Center adapter and perform other configurations necessary to integrate with NetIQ AppManager Control Center:

5c1 Right-click *Server* and select *Configuration*, then *Import*.



The Import dialog opens.

5c2 Click *Browse* to navigate to and select the */OperationsCenter_install_path/* `NetIQControlCenter/ControlCenterImport.config.xml` file:



5c3 Click *OK*.

New NetIQ AppManager Control Center and NetIQ AppManager adapters are created under *Administration* > *Adapters*.

6 Continue to Section 2.3, "Creating and Configuring AppManager Adapters," on page 15.

2.3 Creating and Configuring AppManager Adapters

Adapter integrations enable the Operations Center server to connect to and communicate with various management systems.

Your environment is likely to have many AppManager integrations configured to communicate with AppManager Control Center. You will need to create and configure an Operations Center *NetIQ AppManager* adapter for each instance of AppManager.

For ease-of-use, a NetIQ AppManager adapter is automatically created as a part of the procedure in Section 2.2, "Installing Operations Center Server and Dashboard," on page 13. You will need to configure the properties for this adapter, and then create additional adapters for all other instances of AppManager.

This section covers basic configuration of the NetIQ AppManager adapter. For directions on additional configurations such as configuring for Windows Authentication, adding NetIQ Alarm Comments and using SXL templates to transform event messages; see "NetIQ AppManager" in the *Operations Center 5.5 Adapter and Integration Guide*.

To configure NetIQ AppManager adapters:

1 Launch the Operations Center console if it is not open already.

1a Start a Java-enabled Web browser.

1b In the Location/Address field, enter the following Uniform Resource Locator (URL) address:

`http://server_name:80`

where *server_name* is the Transmission Control Protocol/Internet Protocol (TCP/IP) hostname of the server that is running Operations Center and `80` is the default port setting on Windows. On UNIX, the default server port is `8080`.

The Operations Center server login page displays

1c Enter the login credentials for the default administrator account:

- **user name:** `admin`
- **password:** `formula`

As soon as possible, be sure to change the passwords on all default user accounts. For more information, see "Special User and Group Accounts " in the *Operations Center 5.5 Security Management Guide*.

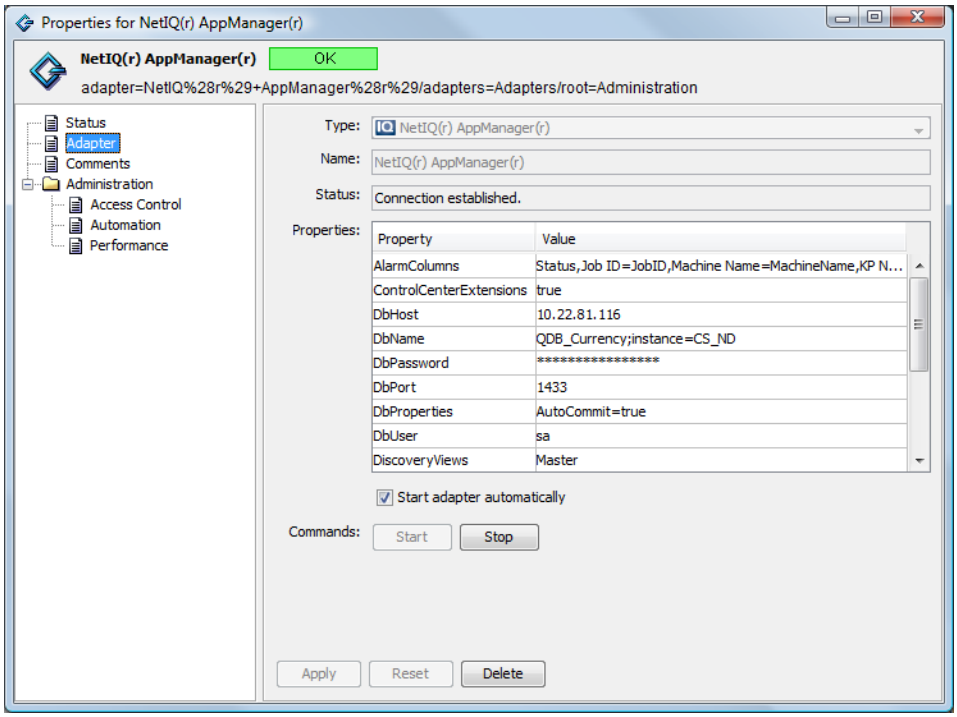
1d Click *Login*.

2 From the Explorer pane, expand *Administration* > *Adapters*.

3 Right-click *NetIQ AppManager*, and select *Properties*.

The Properties dialog opens.

4 Select *Adapter* in the left panel.



5 Specify the following adapter properties as required:

- **AlarmColumns:** A comma-separated list that determines which alarm columns display and the order in which the alarm items display (date/time, rule, etc.) in the Alarms view. Available alarm columns include: *EventID*, *ParentEventID*, *JobID*, *Status*, *FirstOccurConsoleTime*, *LastOccurConsoleTime*, *FirstOccurTimeString*, *LastOccurTimeString*, *ObjID*, *MachineName*, *KPName*, *Severity*, *EventMsg*, *Occurrence*, *ChildComment*, and *ModificationTime*.

  The default *Date/Time* in Operations Center is mapped to the *LastOccurConsoleTime* for NetIQ AppManager. Agent occurrence times can be displayed using *FirstOccurTimeString* and *LastOccurTimeString*. For example,

  `Last Occurrence (Agent)=LastOccurTimeString`

- **ControlCenterExtensions:** Enables special extensions used with AppManager Control Center and enables the SCM job to communicate with the adapter. Default is `false`.

  IMPORTANT: It is important to update the ControlCenterExtensions property to `true`.

- **DbHost:** The name of the host on which the NetIQ data repository resides.
- **DbName:** The NetIQ database name. Note that the AppManager database must be case insensitive. The default is `QDB`.

  If the NetIQ database is located on a named instance of a database, declare the instance name after the database name, and separated by a semi-colon:

  `QDB;instance=`*`instance_name`*

  For example, `QDB;instance=SQL208R2`
- **DbPassword:** The DbUser password.
- **DbPort:** The port on which the NetIQ database server listens. The default is `1433` which is the standard SQL Server port configuration.
- **DbProperties:** Enter a value when it is necessary to override a database connection property.

For example, some versions of SQL Server require setting AutoCommit to `False`, but the default setting in DbProperties is `AutoCommit=true`. Use DbProperties to set it to `false`.

To specify multiple properties, comma-delimit the name-value pairs.

- **DbUser:** The database user ID with unrestricted access to the database identified in the DbName property. The default ID is `sa`.
- **DiscoveryViews:** A list of views to discover at adapter startup. The default is `Master`, which allows the discovery of all views listed in the master. Add custom views separated by a comma.

IMPORTANT: Do not remove `Master` from the DiscoveryViews property values, it is required to view AppManager servers in Operations Center.

- **ReconTimer:** The NetIQ adapter schedules reconciliation events every x number of minutes following the completion of the previous reconciliation event. Use the Reconciliation Time property to specify the number of minutes for the time interval.

  For example, if it takes 30 minutes to reconcile the differences each time and the schedule for the ReconTimer is 15 minutes, the entire reconciliation event actually takes 45 minutes. The default is `0`.
- **ReformateEventFields:** Alarm column names that require Operations Center to truncate leading characters. For example, if the KPName column contains ###:NT_CPU but only NT_CPU should display, the entry is:

  ```
  KPName=:
  ```

  Use any characters as the truncation delimiter. If more then one alarm column requires truncation, use a comma to separate the field name and delimiter value pairs. For example:

  ```
  KPName=:,ChildComment=&.
  ```
- **Script.onError:** A script that executes if the adapter fails for any reason. For example, the script can print the reason for the failure as msg using log.info(msg).
- **Script.onInitialized:** A script that executes when the adapter initializes.
- **Script.onStarted:** A script that executes when the adapter starts, either manually or automatically when the Operations Center server starts.
- **Script.onStopped:** A script that executes after stopping the adapter.
- **ScriptCategories:** The list of Knowledge Scripts (KS) that run to populate element jobs. The default categories are:

  ACTION,ARCSERVE,CLIENT,DISCOVERY,GENERAL,MTS,NT,NTADMIN,SQL, WIN2000

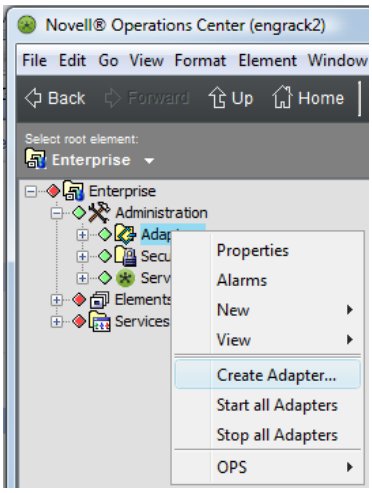
6. To automatically start the adapter after starting the Operations Center server, select the *Start adapter automatically* check box, then clear the check box to start the adapter manually after starting the Operations Center server.
7. Click *Apply*.
8. If the adapter has not been configured to start automatically in Step 6, manually start the adapter.

   8a. Right-click the adapter object, and select *Start Adapter*.
9. Verify that the adapter starts successfully:
   - Monitor the adapter's status under *Administration* > *Adapters*.

     If successful, condition will be `OK` (green) with a `Connection established.` message.
   - Check under *Enterprise* > *Elements* to confirm the adapter's structure is built successfully.

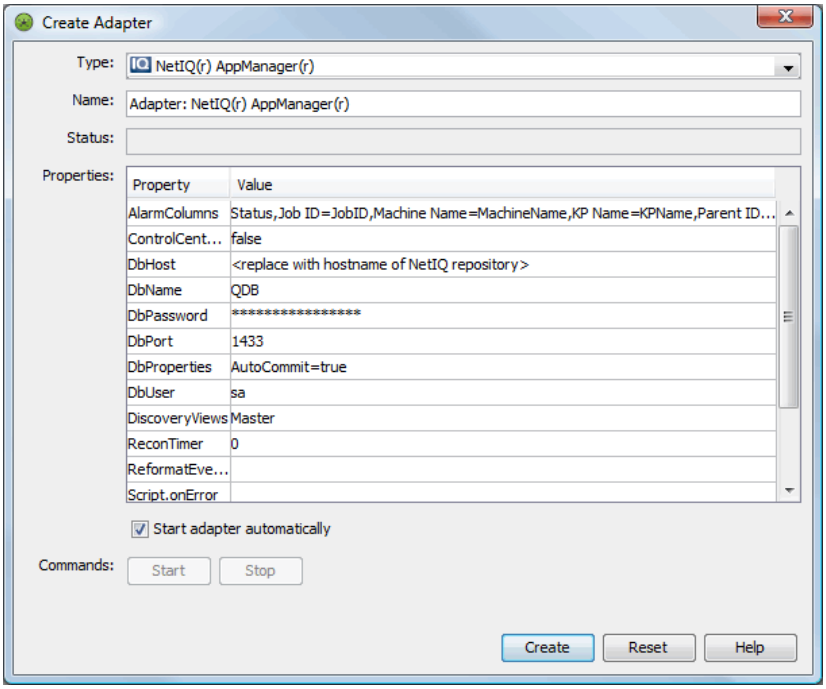
10 Perform the following steps to create and configure additional *NetIQ AppManager* adapters for each instance of NetIQ AppManager in your environment:

10a Right-click *Adapters* and select *Create Adapter*.



The Create Adapter dialog opens.

10b Click the *Type* drop-down list and select *NetIQ AppManager*.



Adapter properties display as a table in the Properties section.

10c Click the *Name* field and change the default name to one that defines the integration, such as `NetIQ AppManager on Server_Name`.

10d Define adapter properties as required.

For descriptions, see Step 5 on page 16.

10e To automatically start the adapter after starting the Operations Center server, select the *Start adapter automatically* check box, then clear the check box to start the adapter manually after starting the Operations Center server.

10f Click *Create*.

The new adapter object displays in the Explorer pane after it starts.

If two adapters share the same name, the adapter created last has an incremental number appended to the end of its name.

10g If the adapter has not been configured to start automatically in Step 10e, manually start the adapter. For instructions, see Step 8 on page 17.

10h Verify that the adapter starts successfully. For instructions, see Step 9 on page 17.

11 Repeat Step 10 on page 18 as necessary to create an adapter for each instance of NetIQ AppManager that communicates with NetIQ Control Center.

12 Continue to Section 2.4, "Configuring the NetIQ Control Center Adapter," on page 19.

2.4 Configuring the NetIQ Control Center Adapter

After creating adapters for NetIQ AppManager implementations, the next step is to establish connections with NetIQ AppManager Control Center to import element hierarchy structures and data. This is accomplished by configuring a special *NetIQ AppManager Control Center* adapter in Operations Center. The *NetIQ AppManager Control Center* adapter is for use only with the NetIQ AppManager Operations Portal integration and cannot be configured as a stand-alone adapter.

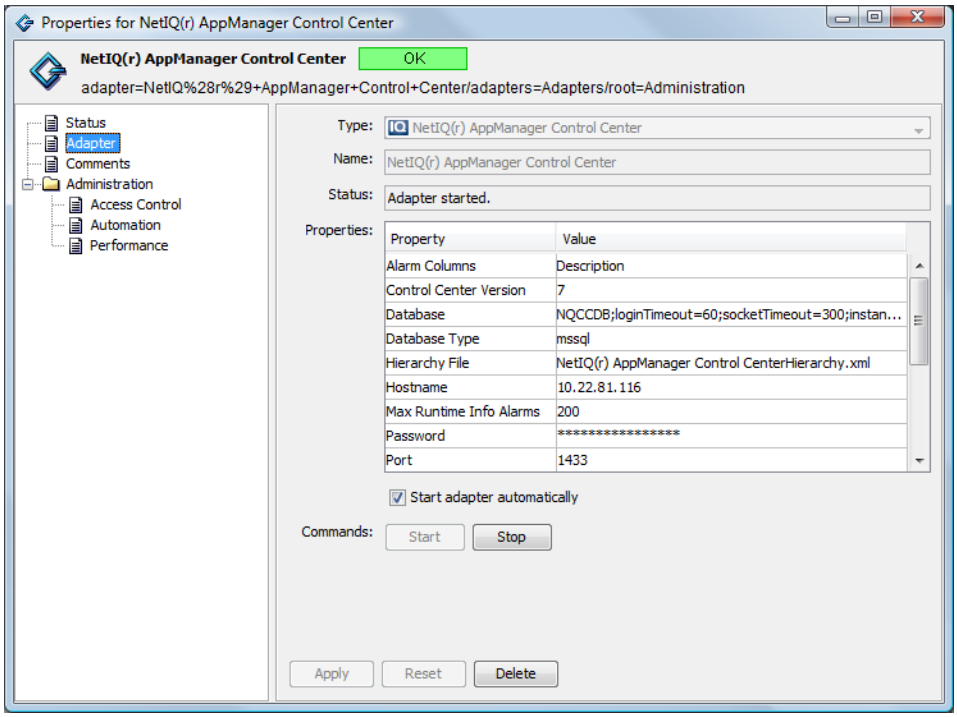
To configure the NetIQ AppManager Control Center adapter:

1 From the Explorer pane, expand *Administration* > *Adapters*.

2 Right-click *NetIQ AppManager Control Center*, and select *Properties*.

The Properties dialog opens.

3 Select *Adapter* in the left panel.



4 Specify the following important adapter properties as required for connectivity:

- **Control Center Version:** The version of NetIQ AppManager Control Center that is installed. If connecting to NetIQ AppManager Control Center version 7, enter `7`; for NetIQ AppManager Control Center version 8, enter `8`; for NetIQ AppManager Control Center version 8.2, enter `8.2`
- **Database:** The name of the AppManager Control Center data repository. Note that the AppManager Control Center database must be case insensitive. The default is `NQCCDB;loginTimeout=60;socketTimeout=300`

  The following jTDS properties for the database connection, in which

  - `loginTimeout` specifies a timeout, in seconds, for establishing the database connection.
  - `socketTimeout` specifies a timeout, in seconds, for database communications. If there is a faulty network connection, the database communications timeouts after this period.

    If database queries are running longer before results are returned, it is best to set a high enough socket timeout to alleviate the risk of the timeout being triggered while results are still being gathered on the database server. However, we recommend that you don't set the socket timeout value too high because if the connection is unexpectedly dropped, the next query might not be executed until the connection is re-established and the timeout value is reached.

  For more information about jTDS properties, go to The jTDS Project Web Site (http://jtds.sourceforge.net/faq.html)

  If the AppManager Control Center database is located on a named instance of a database, declare the instance name after the database name, and separated by a semi-colon:

  `NQCCDB;instance=`*`instance_name`*

  For example, `NQCCDB;instance=SQL208R2`

- **Database Type:** The database type for the NetIQ AppManager Control Center data repository. Default is `mssql`.
- **Hostname:** The name of the host on which the NetIQ AppManager Control Center data repository resides.
- **Password:** The password for the database repository named in the *Database* field. This is a case-sensitive value.
- **Port:** The port on which the NetIQ AppManager Control Center data repository server listens. The default is 1433 which is the standard SQL Server port configuration.
- **User Name:** The user name used to access the NetIQ AppManager Control Center repository.

5 Specify the following important adapter properties as required for scheduling and data retrieval:

- **SCM Job Delay:** The number of seconds to wait after the core element structure is built before running the SCM job process. This process also updates element condition information.
- **Service Map Query Schedule:** Specifies how often to run the query to update element drawing and layouts from the NetIQ AppManager Control Center data repository. Defaults to `onstart & every 5 minutes between 00:00 and 23:59 on MON,TUE,WED,THU,FRI,SAT,SUN`.

  As this is the most expensive query to run, it is recommended to schedule this less frequently or during non-peak hours.
- **State Query Schedule:** Specifies how often to run the query to update element state information from the NetIQ AppManager Control Center data repository. Defaults to `onstart & every 30 seconds between 00:00 and 23:59 on MON,TUE,WED,THU,FRI,SAT,SUN`.
- **Structure Query Schedule:** Specifies how often to run the query to update element structures from the NetIQ AppManager Control Center data repository. Defaults to `onstart & every 5 minutes between 00:00 and 23:59 on MON,TUE,WED,THU,FRI,SAT,SUN`.

6 Specify other adapter properties as required. The majority of these adapter properties are standard options among all Operations Center adapters.

- **Alarm Columns:** A comma-separated list that determines which alarm columns display and the order in which the alarm items display (date/time, rule, etc.) in the Alarms view. Available alarm columns include: *Description*.
- **Hierarchy File:** A file in the `/OperationsCenter_install_path/database` directory that contains an XML description of the element hierarchy to build below the adapter element. The default is `NetIQ(r) AppManager Control CenterHierarchy.xml`. Do NOT change this value unless instructed by Technical Support.
- **Max Runtime Info Alarms:** Configuration for alarms used by the adapter for internal processing. The default is `200`. Do NOT change this value unless instructed by Technical Support.
- **Script.onError:** A script that executes if the adapter fails for any reason. For example, the script can print the reason for the failure as msg using log.info(msg).
- **Script.onInitialized:** A script that executes when the adapter initializes. All of the Script.* properties are optional.
- **Script.onStarted:** A script that executes when the adapter starts, either manually or automatically when the Operations Center server starts. Defaults to `@templates/ControlCenter/OnDIStart.fs`. Do NOT change this default value unless instructed by Technical Support.

- **Script.onStopped:** A script that executes after manually stopping the adapter.

7 To automatically start the adapter after starting the Operations Center server, select the *Start adapter automatically* check box, then clear the check box to start the adapter manually after starting the Operations Center server.

8 Click *Apply*.

9 If the adapter has not been configured to start automatically in Step 7 on page 22, manually start the adapter.

9a Right-click the adapter object, and select *Start Adapter*.

10 Verify that the adapter starts and the adapter and service model hierarchies build successfully, by doing the following:

- Monitor the *NetIQ AppManager Control Center* adapter's status.

  If successful, condition will be `OK` (green) with a `Connection established` message.
- Check under *Enterprise* > *Elements* to confirm the adapter's structure built successfully.
- Check under *Enterprise* > *Service Models* to confirm the *NetIQ AppManager Control Center* structure is completely built.

  It might take 5-10 minutes for the Service Model hierarchy to build after the BSCM job runs.

11 Continue to Section 2.5, "Configuring the Dashboard Integration," on page 22.

2.5 Configuring the Dashboard Integration

Before using the AppManager Operations Portal, there are configurations that must be performed to the Operations Center Dashboard to further customize the portal integration, layout, and "look & feel".

To configure the Operations Center Dashboard:

1 Add the following line to the `/OperationsCenter_Dashboard_install_path/server/webapps/ROOT/WEB-INF/classes/portal-ext.custom.properties` file:

```
default.regular.theme.id=netiq_WAR_netiqtheme
```

2 Start the Operations Center Dashboard.

For detailed steps and descriptions, see "Starting and Stopping the Dashboard" in the *Operations Center 5.5 Dashboard Guide*.

3 On the installation server, using your Web browser, access the URL of the Dashboard server:

`http://server:dashboard_port`

For example, the Dashboard is installed on your current machine and the HTTP port (Operations Center Dashboard Configuration Manager) set to 8080, then point your browser to:

`http://localhost:8080`

When successful, the guest home page for the Dashboard displays.

4 Use the *Sign In* portlet to log in using the Operations Center `admin` account.

5 Click *Welcome* and select *Control Panel*.

6 Do the following to set the default portal theme:

6a Under *Portal*, select *Communities*.

6b Click *Actions* next to the *Guest* community, and select *Manage Pages*.

The page updates to Edit Pages for Community: Guest.

6c Under *Public Pages*, click the *Look & Feel* tab.

6d In the *Available Themes* section, click *AppManager*.

The page updates to show the AppManager theme under Current Themes.

6e Click the *Back* tab.

The page updates to the Communities listing.

7 Do the following to create the AppManager Operations community:

7a Click Add.

The page updates to show the create community form.

7b Type `AppManager Operations` in the *Name* field.

7c (Optional). Type a description in the *Description* field.

7d Select `Restricted` from the *Type* drop-down list.

7e Click *Save*.

The page updates to the Communities listing.

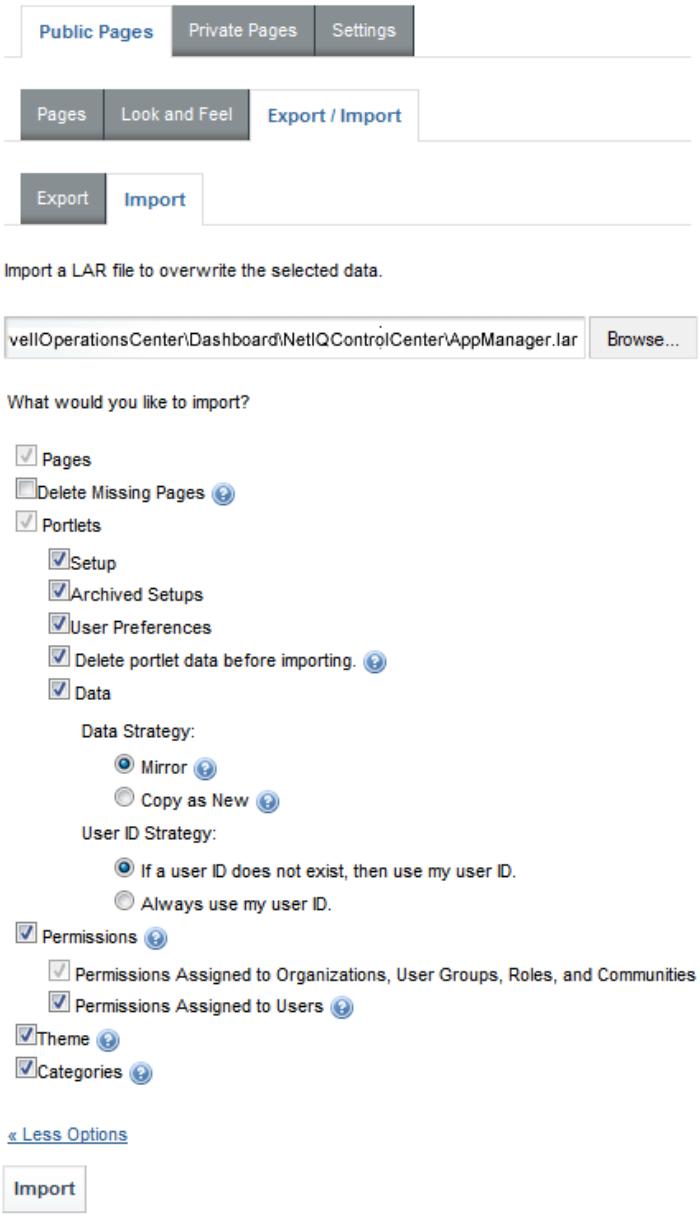
8 Do the following to import AppManager Operations Portal configurations:

8a Click *Actions* next to the *AppManager Operations* community, and select *Manage Pages*.

The page updates to Edit Pages for Community: AppManager Operations.

8b Switch to the *Export/Import* tab.

8c Click *Import*.



8d Click *Browse,* and navigate to and select the `/OperationsCenter_Dashboard_install_path/NetIQControlCenter/AppManager.lar` file.

8e Click *Open*.

The file name displays in the field.

8f Click *More Options* and select from the options provided to configure what is imported from the file.

The following options are recommended (shown in the above illustration):

- Pages
- Portlets
  - Select all check box sub-options.

- Select *Mirror* under Data Strategy.
- Select *If a user ID does not exist, then use my user ID.* under User ID Strategy.

- Permissions
  - Select all sub-options.
- Theme
- Categories

8g Click *Import*.

9 Click *Back to Guest* to exit the Control Panel.

10 Log out of the Operations Center Dashboard.

11 Stop the Operations Center Dashboard.

For detailed steps and descriptions, see "Starting and Stopping the Dashboard" in the *Operations Center 5.5 Dashboard Guide*.

12 Add the following lines to the `/OperationsCenter_Dashboard_install_path/server/webapps/ROOT/WEB-INF/classes/portal-ext.custom.properties` file:

```
auth.forward.by.last.path=true
```

```
default.landing.page.path=/web/appmanager-operations/starting-point
```

13 Restart the Operations Center Dashboard.

For detailed steps and descriptions, see "Starting and Stopping the Dashboard" in the *Operations Center 5.5 Dashboard Guide*.

14 Do one of the following:

- Continue to Chapter 3, "Using the AppManager Operations Portal," on page 27 to configure and use the portal.
- Continue to Appendix A, "Advanced Administrative Topics," on page 35 to import AppManager Control Center user accounts.

3 Using the AppManager Operations Portal

The NetIQ AppManager Operations Portal is a specialized implementation of the Operations Center server and dashboard. This implementation offers a limited version of Operations Center functionality.

For more information about the Operations Center Dashboard and the portlets, which is the platform for the AppManager Operations Portal, see *Operations Center 5.5 Dashboard Guide*.

This section provides an overview of the web application and customizations for the AppManager Operations Portal:

- Section 3.1, "Introducing the AppManager Operations Portal," on page 27
- Section 3.2, "Logging into the AppManager Operations Portal," on page 27
- Section 3.3, "Customizing the AppManager Operations Portal," on page 28
- Section 3.4, "AppManager Operations Portal Features for Charting NetIQ AppManager Data," on page 31
- Section 3.5, "AppManager Operations Portal Features for Viewing NetIQ AppManager Jobs," on page 32
- Section 3.6, "AppManager Operations Portal Features for NetIQ AppManager Alarms," on page 33

3.1 Introducing the AppManager Operations Portal

For users, the AppManager Operations Portal provides a personal Web desktop. They can personalize the page display, customize the content, and save changes between sessions. Not only can private, personal pages be created, but users can join communities that have shared pages. Content can be distributed among communities and the responsibility of moderating content can be delegated to various users.

The AppManager Operations Portal is pre-configured with an AppManager Operations community. The Starting Point page is configured as the home page and includes an Alarms, Charting, and Layout portlets that are updated by clicking on an element in the Navigation portlet.

For more information on communities, portal pages, and portlets; see *Operations Center 5.5 Dashboard Guide*.

3.2 Logging into the AppManager Operations Portal

To log into the AppManager Operations Portal:

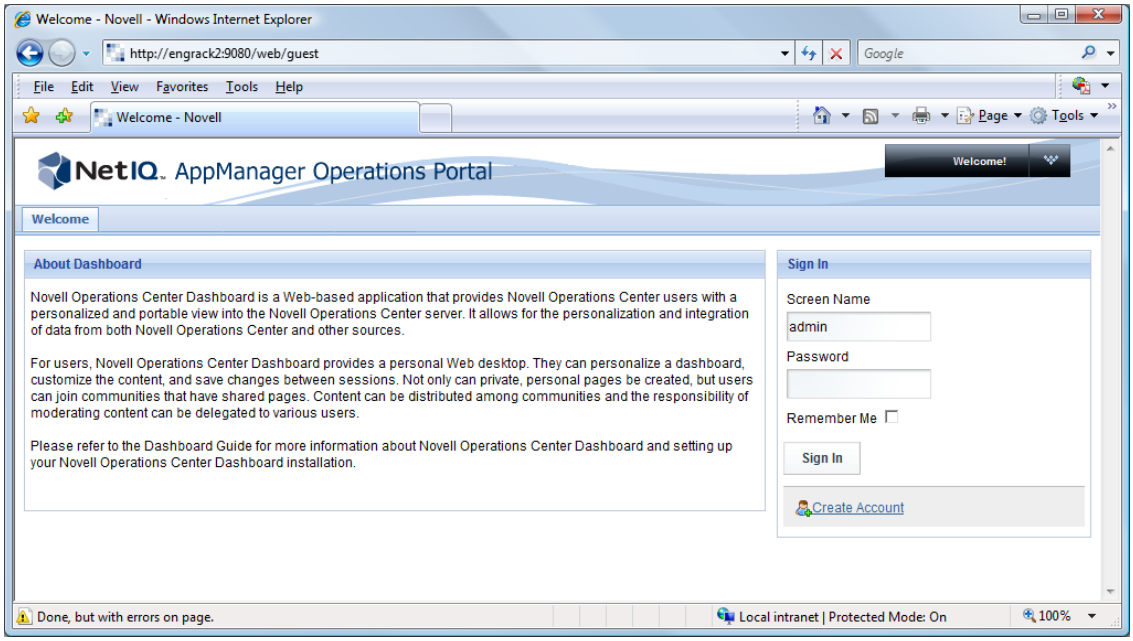
1 On the installation server, using your Web browser, access the URL of the Operations Center Dashboard server:

`http://server:dashboard_port`

For example, the Dashboard is installed on your current machine and the HTTP port (Operations Center Dashboard Configuration Manager) set to 8080, then point your browser to:

`http://localhost:8080`

When successful, the guest home page displays:



2 Enter your *Screen Name* and *Password* in the Sign In portlet.

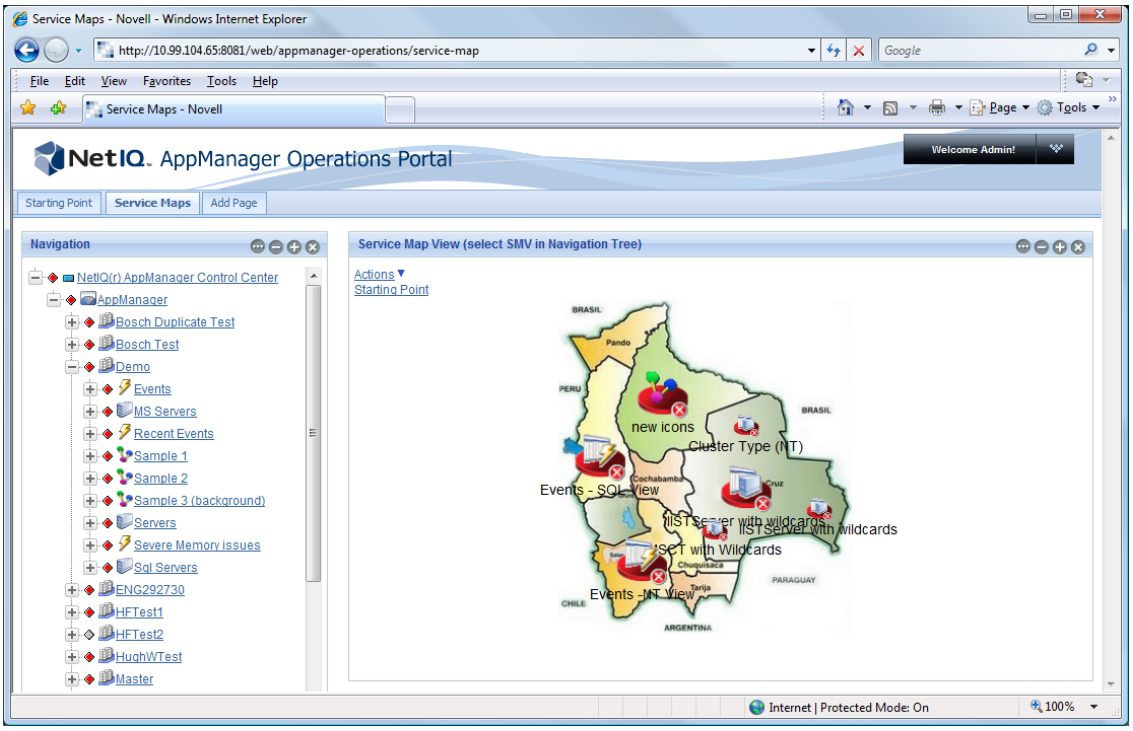
3 Click *Sign In*.

The user account is authenticated, and the Starting Point page displays.

3.3 Customizing the AppManager Operations Portal

The NetIQ AppManager Operations Portal provides users a Starting Point page under the AppManager Operations community by default. The *Staring Point* page is pre-configured with Navigation, Charting, and Alarms portlets. A second page, the *Service Maps* page is pre-configured with Navigation and Layout portlets.

Figure 3-1 *The Service Maps page*



Additional communities and pages can be created. Any portal page can be customized by changing the layout, selecting themes for the “look and feel”, adding content via portlets, and adding navigation or other functionality to the page. These changes are saved between sessions. The various actions that a user can take depend on the permissions assigned.

- Section 3.3.1, “Personal Pages and Communities,” on page 29
- Section 3.3.2, “Adding Content with Portlets,” on page 30
- Section 3.3.3, “Exposing AppManager Control Center Information,” on page 30
- Section 3.3.4, “Common Portlet Configurations,” on page 30

3.3.1 Personal Pages and Communities

Portal pages can be considered as desktops where portlets are added. These include personal pages for individual users and shared pages among multiple users. Shared pages are grouped together into communities. Communities offer content to users with a similar interest or skill.

Users can have both personal and shared pages. They switch between personal pages and communities using a link.

For information and instructions, see “Personal Pages, Page Configurations, and Communities” in the *Operations Center 5.5 Dashboard Guide*.

3.3.2 Adding Content with Portlets

Any portal page can be customized by changing the layout, selecting themes for the "look and feel", adding content via portlets, and adding navigation or other functionality to the page. These changes are saved between sessions. The various actions that a user can take depend on the permissions assigned.

For an instructions, see the following topics in the *Operations Center 5.5 Dashboard Guide*:

- "Adding Content to a Page Using Portlets"
- "Adding a Site Map, Breadcrumbs, or Navigation to a Page"
- "Adding a Refresh Feature to Pages"
- "Integrating Reports from External Reporting Tools Using iFrames"

Content from other sources can be added to the portal using portlets. The portal leverages portlets that are JSR-168 compliant and any third-party portlets built with this standard can be deployed in the portal. For more information, see "Deploying Portlets to the Dashboard" in the *Operations Center 5.5 Dashboard Guide*.

3.3.3 Exposing AppManager Control Center Information

Operations Center portlets are used to surface AppManager Control Center data in the portal. They added to a page in the same way as other content. Some data, such as alarms and element status, can be viewed in real time with automatic updates. Standard alarm operations are often available in the portal.

For an overview and instructions, see the following topics in the *Operations Center 5.5 Dashboard Guide*:

- "Understanding the Operations Center Portlets"
- "Configuring Operations Center Portlets"

3.3.4 Common Portlet Configurations

The following are common configurations can be made to enhance the portlets used to expose data from AppManager Control Center:

- **Home Element:** An element must be selected as the starting point for viewing data within portlets. Each user has a starting element, called the home element, which is set in Operations Center and is the default starting element for all the Operations Center portlets for that user.

  For instructions on configuring a home element for portlets, see "Configuring Home and Starting Elements" in the *Operations Center 5.5 Dashboard Guide*.
- **Starting Elements:** There are four portlets that can be configured to drive (or update) the element on other portlets on the same page. The include the Starter, Navigation, Search and Status portlets. In addition, a custom right-click menu can be configured to update other portlets based on the selected element.

  For information, see the following topics in the *Operations Center 5.5 Dashboard Guide*:
  - "Using Navigation Mode to Drive Multiple Portlets"
  - "Adding Right-Click Context Menus"

- **Custom Right-Click Menus:** Element right-click context menu can be created for some portlets to update information on the page, open additional portal components and an external URL, execute JavaScript commands or perform an operation.

  For instructions, see the following topics in the *Operations Center 5.5 Dashboard Guide*:.

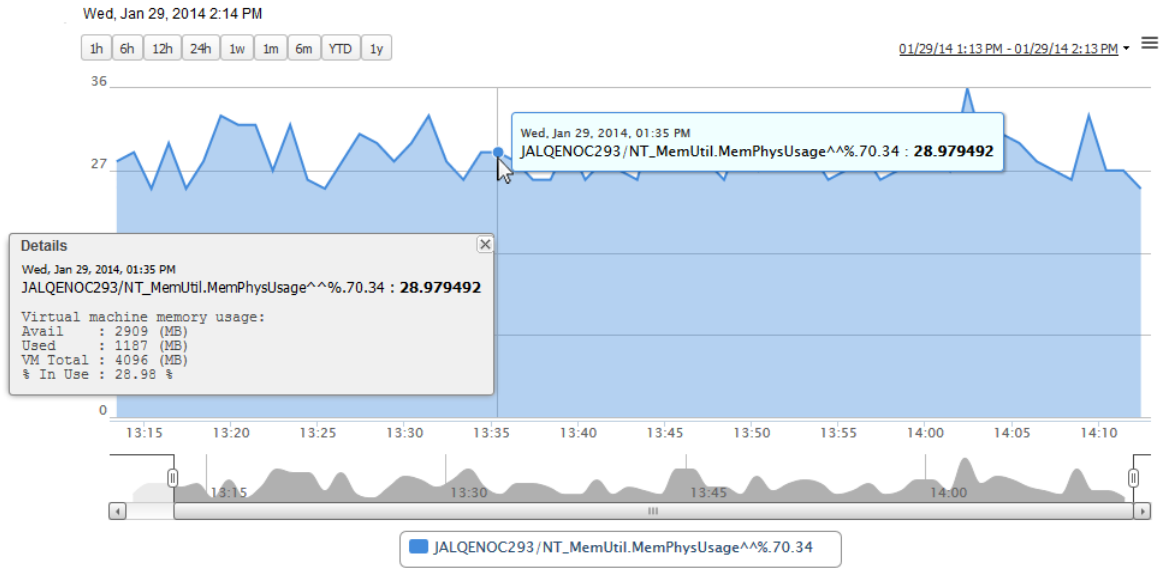
  - "Adding Right-Click Context Menus"
  - "Accessing URLs from Right-Click Menus"
  - "Issuing JavaScript Commands from Right-Click Menus"
  - "Adding Portlet View Links to Right-Click Menus"
  - "Performing Operations Center Server-Side Operations from Right-Click Menus"

3.4 AppManager Operations Portal Features for Charting NetIQ AppManager Data

The NetIQ AppManager Operations Portal provides some features and functionality specifically for NetIQ AppManager elements and data.

In the Charting portlet, a Details dialog shows data point details when clicking on any of the data points in a series.

Figure 3-2 *Details for a data point in the Charting Portlet*



The type of data shown in Data Point Details can vary according the type of data series charted in the Charting portlet. In the illustration above, we see information regarding available, used and total memory usage for a specific point in physical memory usage data series.

This feature is available only for NetIQ AppManager elements.

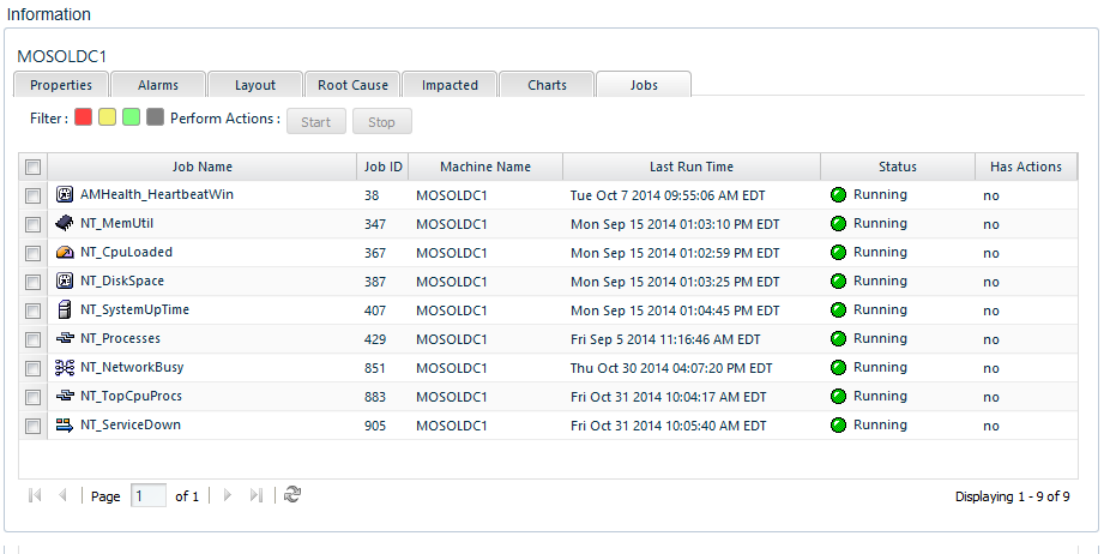
For instructions on configuring the Charting Portlet, see "Configuring the Charting Portlet" in the *Operations Center 5.5 Dashboard Guide*.

3.5 AppManager Operations Portal Features for Viewing NetIQ AppManager Jobs

The NetIQ AppManager Operations Portal provides some features and functionality specifically for NetIQ AppManager jobs.

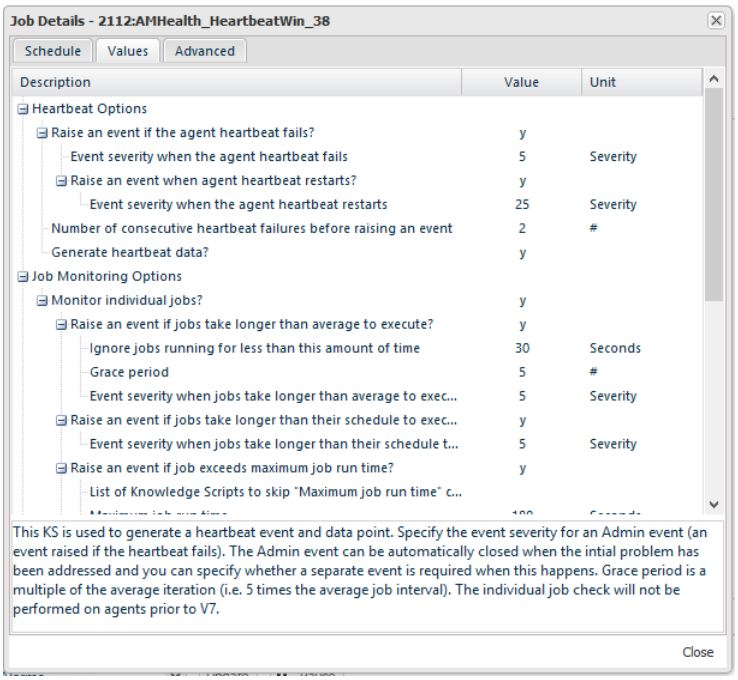
In the Information portlet, a Jobs tab shows a list of jobs for a machine(s). From the Information portlet, you filter the list based on Status, as well as stop or start select jobs.

Figure 3-3 *List of Jobs in the Information Portlet*



Double-click a job to view the job's schedule, knowledge script description and various options settings as set in your NetIQ AppManager application.

Figure 3-4 *List of Jobs in the Information Portlet*



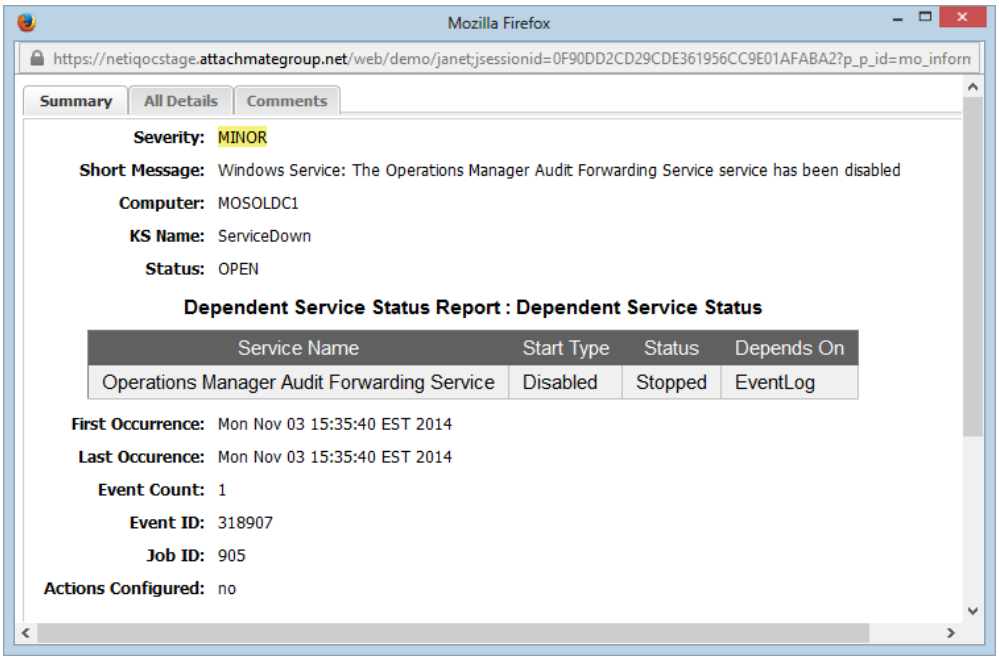
For information on the Information Portlet and instructions on how to configure it, see "Configuring the Information Portlet" in the *Operations Center 5.5 Dashboard Guide*.

3.6 AppManager Operations Portal Features for NetIQ AppManager Alarms

The NetIQ AppManager Operations Portal provides some features and functionality specifically for NetIQ AppManager alarms.

Use the Alarms and Information (Alarms tab) portlets to view AppManager alarms. Double-click an alarm to view a summary of alarm information, all details for the alarm, and even add a comment to the alarm.

Figure 3-5 *Alarm Details for AppManager alarms. Use the Comments tab to add a comment.*



For information on the Alarms portlet, see "Configuring the Alarms Portlet" in the *Operations Center 5.5 Dashboard Guide*. For information on the Information portlet, see "Configuring the Information Portlet" in the *Operations Center 5.5 Dashboard Guide*.

A Advanced Administrative Topics

This section provides information about advance configurations and procedures you can perform in the AppManager Operations Portal.

- Section A.1, “Technical Considerations,” on page 35
- Section A.2, “Upgrading the AppManager Operations Portal,” on page 40
- Section A.3, “Importing Users,” on page 42
- Section A.4, “Important Access Control Permissions for Users,” on page 42
- Section A.5, “Understanding Portal Security,” on page 43

A.1 Technical Considerations

The following are general technical considerations that apply when using the AppManager Operations Portal integration:

- The configuration processes required for the AppManager Operations Portal overwrites any pre-existing NetIQ AppManager adapter definitions saved with the name `NetIQ(r) AppManager(r)`, and any custom configurations to that adapter are lost.

The following sections describe variations as normally expected in AppManager Control Center features and functionality:

- Section A.1.1, “Severity Mapping,” on page 35
- Section A.1.2, “Server Views,” on page 36
- Section A.1.3, “Event Views,” on page 36
- Section A.1.4, “Service Maps,” on page 38
- Section A.1.5, “Jobs,” on page 38
- Section A.1.6, “Service Models,” on page 39

A.1.1 Severity Mapping

Table A-1 lists the alarm severity mapping is used in Operations Center for AppManager events.

Table A-1 *Alarm Severity Mapping*

Operations Center console and AppManager Operations Portal	AppManager Control Center
Critical	Severe
Minor	Warning

Operations Center console and AppManager Operations Portal	AppManager Control Center
Informational	Informational
OK	Diagnostic
OK	OK

A.1.2 Server Views

The following are important differences to note between AppManager Control Center and Operations Center regarding server view severity filters:

- If an AppManager agent is `offline`, the agent element shows as `UNKNOWN` in Operations Center.
- Because both `Diagnostic` and `OK` events are interpreted as `OK` in Operations Center, severity filter results will not be the identical to those in AppManager Control Center.
- Element condition is not updated in real-time; it updates when the SCM job runs. By default, the job runs every 5 minutes but it can be customized in the AppManager Control Center adapter properties. For more information about these settings, see Section 2.4, "Configuring the NetIQ Control Center Adapter," on page 19.
- Filters that are not interpreted intuitively in AppManager Control Center, are interpreted correctly in Operations Center.

  For example, filtering for Install Time (NT) to be greater than a specific date/time (*`DayOfWeek MMM DD HH:MM:SS:YYYY`*), the following interpretations will occur:

  - In AppManager Control Center, the date/time value is interpreted as a string which evaluates day of week first.
  - In Operations Center, the date/time value is interpreted as a standard date/time stamp.

A.1.3 Event Views

The following are important differences to note between AppManager Control Center and Operations Center regarding event views and filters:

- Operations Center displays both parent and child alarms together in the *Alarms* view. For more information on how to manage these alarms, see "Viewing and Sorting Child Alarms" on page 37.
- If Operations Center is unable to retrieve condition/state information from AppManager Control Center, an unmanaged state shows for the event view element in Operations Center.

  The *State Query Schedule* property set for the *NetIQ AppManager Control Center* adapter determines the frequency that event view state is retrieved from AppManager Control Center.
- Operations Center alarm filters evaluate each alarm independently of any parent/child relationships. Therefore, only alarms with matching criteria display in Operations Center. If the parent alarm does not match the filter criteria, it is not displayed.
- For management groups based exclusively on NT, Unix, and Cluster elements, the *Alarms* view does not filter out application events.
- Operations Center does not support orphaned alarms. When an object is deleted, or no longer exists, shows any alarms for that object are no longer available. This applies to both the NetIQ AppManager and NetIQ AppManager Control Center adapters.

The following section provides details on managing parent and child alarms in Operations Center:

- "Viewing and Sorting Child Alarms" on page 37

Viewing and Sorting Child Alarms

In the *Alarms* view, click the *Parent ID* column, to sort and view child alarms together (the alarm representing the parent, has a *Parent ID* value of `0`.

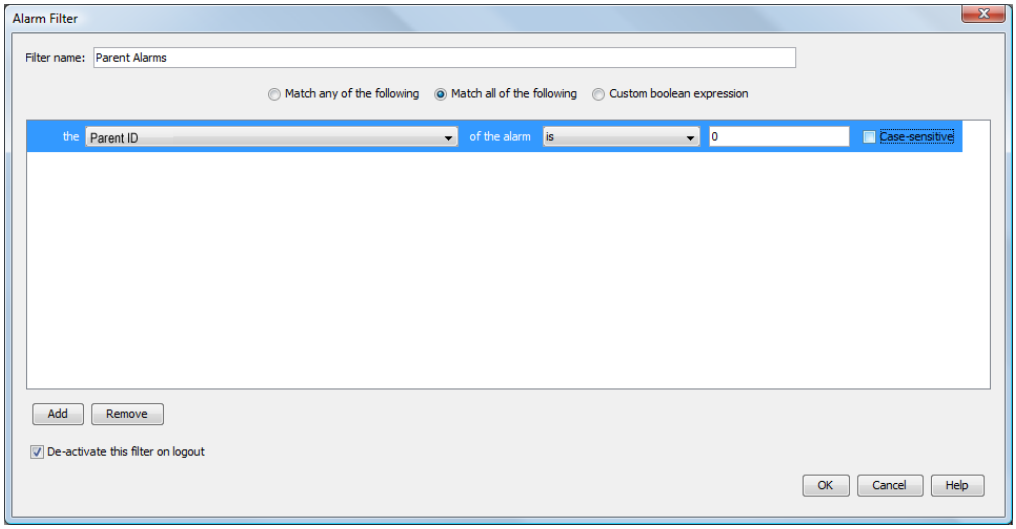
Alternatively, you can setup an alarm filter to include or exclude parent alarms. The following procedure provides step-by-step instructions specific to this use case. For more detailed instructions on creating alarm filters, see "Filtering Alarms" in the *Operations Center 5.5 User Guide*.

To create an alarm filter to include or exclude parent alarms:

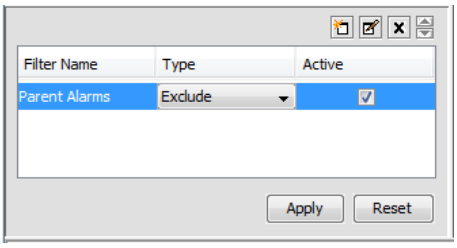
1. In the Operations Center console, click the *Alarms* tab to open the Alarms view.
2. In the *Explorer* pane, select the event view element.
3. Click *Create* in the *Alarm Filter* pane (bottom section of the *Explorer* pane) to open its dialog box.
4. In the *Filter Name* field, specify a name for the filter. For example, `Parent Alarms`.

   The name can contain between 1–40 alphanumeric or space characters only.
5. Select the *Match all of the following* radio button to match all of the condition expressions. Selecting this option joins more than one statement with an AND operator.
6. Click *Add*.

   A blank row displays for defining a filter statement.
7. Click the first drop-down list, then select *Parent ID*.



8. Click the second drop-down list, then select *is*.
9. Click the third drop-down list, then select *0*.
10. Click *Ok* to save the filter.
11. In the *Alarm Filter* pane, select *Exclude* to hide any parent alarms.



12 Select the *Active* check box and click *Apply* to enable the filter.

The view updates to show only child alarms in the view.

A.1.4 Service Maps

When available, Operations Center displays service maps as custom drawings in the *Layout* view or the *Layout* portlet.

Operations Center implements the following service maps shapes: custom nodes, Control Center nodes, AppManager nodes, backgrounds, links between custom nodes (straight line including arrows and reflective of line size), and ellipses.

The following are important differences to note between AppManager Control Center and Operations Center regarding service maps:

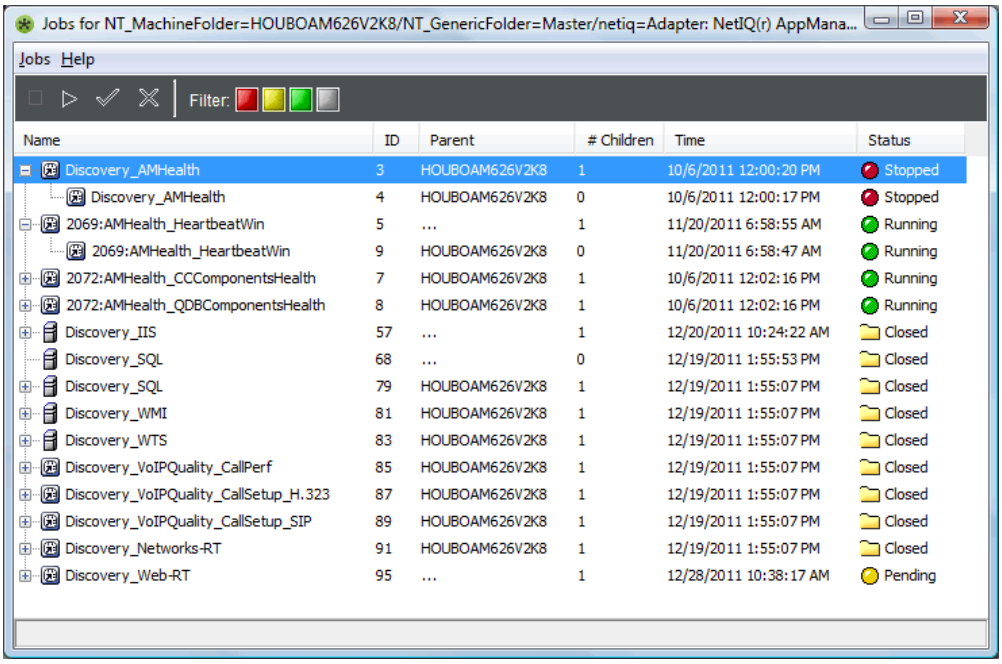
- Most fonts used in Service Maps translate correctly across platforms. However, some fonts might not render correctly in all platforms resulting in incorrect font substitution or word wrapping issues. If this occurs, contact Support (http://www.netiq.com/support/) to find out how to correct these issues.
- (Control Center 7) Operations Center renders service map elements using default service map colors when assigned custom colors cannot be interpreted; such as when a Microsoft Windows theme definition is selected versus a specific color.
- (Control Center 7) If both underline and strike-through attributes are selected for a Service Map node label, these attributes are ignored in the Service Map when using Operations Center Dashboard with Firefox. However, these multiple attribute settings are rendered correctly in the Operations Center console, as well as in the Operations Center Dashboard using Internet Explorer.

A.1.5 Jobs

Unlike AppManager Control Center, Operations Center does not filter jobs according to management group configuration.

To view jobs in Operations Center, right-click a computer element and select *Jobs*. The Jobs dialog lists all jobs for the computer element, including closed jobs.

Figure A-1 *Jobs Dialog*



Operations Center shows a job for each child job received from AppManager Control Center. The value shown in the *Parent* column is a randomly selected server name from the list of associated child jobs.

Jobs menu options are disabled depending on the current state of the job. For example, if the job is in transition, all menu options are disabled. For non-transition states (Stopped, Started, etc), menu options are enabled as appropriate for the current state. Because policy jobs cannot be deleted, the Delete option is always disabled for policy jobs.

A.1.6 Service Models

A Control Center service model is automatically created and maintained under *Services* > *Service Models* in order to establish and maintain the integration with Control Center. This service model is locked from standard Service Model tree modification actions such as adding, moving or renaming elements.

However, if you a need arises where you must delete it, follow the procedure below. To reestablish the connection to Control Center, you must import the Control Center configurations again (see Step 5 on page 14).

To delete the Control Center service model using the Configuration Explorer:

1. Stop the Operations Center server.
2. Open the Configuration Explorer by using the moscfg command.

   For information, see "Using the Configuration Explorer" in the *Operations Center 5.5 Server Configuration Guide*.
3. In the Configurations tree, under your configuration, expand `Organizations` > `NetIQ(r) AppManager Control Center`.

4 Right-click `AppManager` and select *Remove*.

Note that if you remove the `NetIQ(r) AppManager Control Center` element, you must import Control Center configurations again, as described in Section 2.4, "Configuring the NetIQ Control Center Adapter," on page 19.

A.2 Upgrading the AppManager Operations Portal

For complete details on upgrading or applying a patch to Operations Center software, see "Patching Operations Center Server Software" in the *Operations Center 5.5 Server Installation Guide*.

To apply a patch upgrade to the AppManager Operations Portal:

1 Perform pre-installation tasks such as making a backup of Operations Center directories and databases, and copies of custom template files.

For more information see "Pre Installation Tasks" in the *Operations Center 5.5 Server Installation Guide*.

2 Verify all Operations Center clients are logged off.

3 Shutdown the Operations Center server and dashboard.

4 Copy the patch bundle file to the Operations Center installation root directory.

5 At the command prompt from within the Operations Center installation directory, enter:

`java -jar patch_filename(s) patch_option(s)`

For example:

`C:/OperationsCenter_install_path>java -jar 500-20110328-NOC.jar --describe`

where `C:/OperationsCenter_install_path>` is your command prompt. Note that patch files can be listed in any order as the installation process automatically sorts and applies them.

and where, `patch_filename(s)` can be a list of one or more patch files separated by a space,

and where, `patch_option(s)` are any of the following commands that can be added at the end of the patch command:

- **--help:** Displays a list of possible commands including the following options.
- **--describe:** Prints patch manifest information
- **--prompt:** Displays the Operations Center Configuration Manager after the patch is installed.
- **--verbose:** Prints detailed information to the screen as the patch is installed.
- **--force:** Forces a patch to install even if it has already been applied. Never use the force command unless instructed to by Technical Support.

If installing on Windows and User Access Control (UAC) is enabled, you must run the command prompt as the Administrator.

6 During installation, the following occurs:

- A back up is automatically created for all files that are overwritten. For more information about rollback files, see "Rolling Back a Patch Installation" in the *Operations Center 5.5 Server Installation Guide*.
- Patches (of the same version) that have already been applied are skipped unless the `--force` option was set.
- The Operations Center Configuration Manager always runs silently and applies the current settings.

- The patch does not override the existing Operations Center Configuration Manager settings.

  For more information regarding the Operations Center Configuration Manager, see the *Operations Center 5.5 Server Configuration Guide*.

7 Start the Operations Center server.

8 Import updated NetIQ Control Center configurations.

8a Launch the Operations Center console.

8b Perform the following steps to import the XML file necessary to update configurations for the Control Center adapter:

8b1 From the Explorer pane, expand *Administration*.

8b2 Right-click *Server* and select *Configuration*, then *Import*.

The Import dialog opens.

8b3 Click *Browse* to navigate to and select the `/OperationsCenter_install_path/NetIQControlCenter/ControlCenterUpdate.config.xml` file.

8b4 Click *OK*.

9 If you have Control Center 8 installed, update the NetIQ AppManager Control Center adapter properties:

9a In the Operations Center console, from the Explorer pane, expand *Administration* > *Adapters*.

9b Right-click the *NetIQ AppManager Control Center*, and select *Properties*.

The Properties dialog opens.

9c Select *Adapter* in the left panel.

9d In the *Properties* section, update the *Control Center Version* property. Enter `8` for Control Center 8.

9e Click *Apply*.

10 Update all pre-existing NetIQ AppManager adapters to adjust the display of alarm information:

10a In the Operations Center console, from the Explorer pane, expand *Administration* > *Adapters*.

10b Right-click the *NetIQ AppManager* adapter, and select *Properties*.

The Properties dialog opens.

10c Select *Adapter* in the left panel.

10d In the *Properties* section, update the following portion of the *AlarmColumns* definition,

```
Last Occurrence=LastOccurTime
```

to read:

```
Last Occurrence (Agent)=LastOccurTimeString
```

10e Click *Apply*.

10f Perform the above steps for any additional NetIQ AppManager adapters.

11 Restart the Operations Center console session by doing one of the following:

- Log out of the Operations Center console, then log in.
- Close the console, then relaunch the console.

A.3 Importing Users

Each user that will access the NetIQ Operations Portal must be an authorized Operations Center Dashboard user.

Access to licensed Operations Center functions and data is allowed only after a user is identified and authorized. Operations Center supports two methods of user identification and authentication:

- Native authentication
- Integrated LDAP authentication

For information about native user authentication and creating user accounts, see "User Identification and Authorization" in the *Operations Center 5.5 Security Management Guide*.

When configuring Operations Center for NetIQ AppManager users, we recommend using LDAP for external authentication. For instructions, see *Configuring LDAP Authentication* in the *Operations Center 5.5 Security Management Guide*.

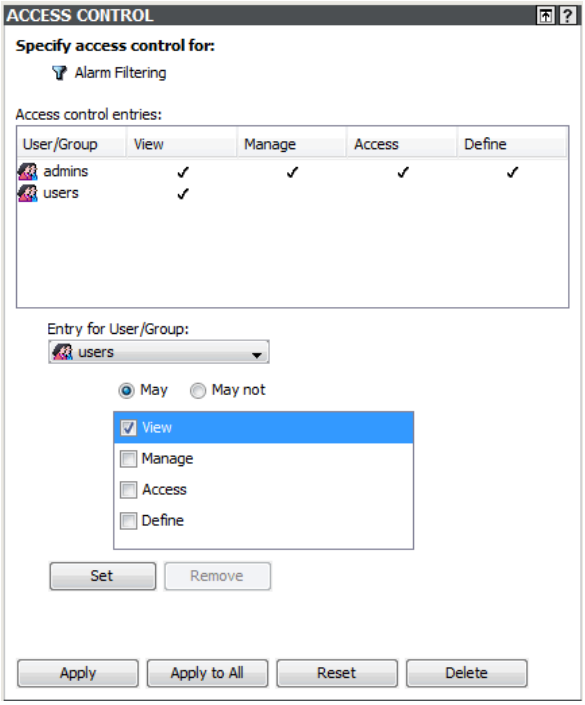
A.4 Important Access Control Permissions for Users

It is important that all AppManager Operations Portal users have *View* access permissions granted for server-side alarm filtering in order for event filters to function properly.

To assign Alarm Filtering access privileges to users and/or groups:

1. From the Operations Center console, in the Explorer pane, expand *Administration* > *Server* > *Alarm Filtering*.
2. Open the *Portal* view.
3. Expand the *Access Control* panel. The list of groups and users who are assigned access to the element displays in the *Access Control Entries* table.
4. To add a user or group to the table, click the *Entry for User/Group* drop-down list and select the desired user or group name.

   Groups are identified by this icon: .
5. The *May* radio button is selected by default. Select the *View* check box.



6 Click *Set* to apply the selected permissions to the user or group.

The user or group is added to the table.

7 Repeat Step 4 on page 42 thru Step 6 on page 43 for all individual users or user groups that are using AppManager Operations Portal.

8 Click *Apply to All* to remove access privileges assigned to all defined alarm filters and force them to inherit the privileges from this parent element.

For more information about assigning access control permissions, see *Access Control* in the *Operations Center 5.5 Security Management Guide*

A.5 Understanding Portal Security

The NetIQ AppManager Operations Portal allows for single sign-on, personalization, and integration of data from NetIQ AppManager Control Center.

- Section A.5.1, "Operations Center Server and Dashboard Interaction," on page 43
- Section A.5.2, "Setting User Permissions on Portal Pages and Page Content," on page 44
- Section A.5.3, "Dashboard Control Panel and Administration Portlets," on page 44

A.5.1 Operations Center Server and Dashboard Interaction

User and group accounts are leveraged from the Operations Center server to give users access to the Dashboard. Therefore, Operations Center and the Dashboard use the same user and group accounts. User accounts are organized into groups that exist both in Operations Center and in the Dashboard.

Operations Center and the dashboard use the same user and group accounts. User accounts are organized into groups that exist both in Operations Center and in the dashboard. Because the same user accounts are used by both Operations Center and the dashboard, actions performed on a user account in the dashboard impact the account in Operations Center and vice versa.

In contrast to the above, actions performed on user groups in Operations Center impact the groups in the dashboard, while the reverse is not true. Because of this, groups in the dashboard can be organized into a different structure designed to follow your corporate hierarchy.

For more information about interaction and synchronization between the Operations Center server and dashboard, see "User Accounts" in the *Operations Center 5.5 Dashboard Guide*.

A.5.2 Setting User Permissions on Portal Pages and Page Content

Operations Center permissions (determines the data in the Operations Center server that the user can access) cannot be changed in the dashboard. To change permissions to Operations Center, you must access the permissions in the Operations Center console.

Dashboard permissions are relevant to all functionality in the dashboard. When user accounts are created in the dashboard and thus added to the Operations Center server, the user is automatically added to the users group in the Operations Center server and receives all permissions assigned to the users group.

These accounts are automatically set to have restricted access to the Operations Center console. This means that the user can only log in to the dashboard or another Operations Center Web client; the user cannot log in to the Operations Center console.

Dashboard permissions are granted to users or user groups to perform actions that on a set of resources using roles. Dashboard roles are used to define permissions across their scope: across the portal, across a user groups, or across a portal community, or assign individual permissions to a specific portlet.

Permissions can be used to assign tasks to users to help with the administration of the dashboard. For example, assign to a user some of the roles of an enterprise, organization, or location administrator. Assign users to manage communities and pages within communities. You can moderate content by distributing it among communities and delegate the responsibility for moderating communities to various users.

For more information about dashboard users and permissions, see "User Accounts" and "Portal and Community Permissions" in the *Operations Center 5.5 Dashboard Guide*.

A.5.3 Dashboard Control Panel and Administration Portlets

All of the administrative functions needed to maintain the portal or its content can be found in the control panel. This provides access to user and group accounts and the assigning of dashboard permissions.

For more information about the dashboard control panel, see "About the Dashboard Control Panel" in the *Operations Center 5.5 Dashboard Guide*.

For more information about dashboard roles and permissions, see and "Portal and Community Permissions" in the *Operations Center 5.5 Dashboard Guide*.